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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,091	07/24/2003	Alaa Y. El-Sherif	TI-35811	4529
7590	10/21/2004			
Dan Swayze Texas Instruments Incorporated M/S 3999 P.O.Box 655474 Dallas, TX 75265			EXAMINER TON, MY TRANG	
			ART UNIT 2816	PAPER NUMBER
DATE MAILED: 10/21/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/626,091

Applicant(s)

EL-SHERIF ET AL.

Examiner

My-Trang N. Ton

Art Unit

2816

*Am*

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION*****Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "the third transistor" (claim 6, lines 14-15) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

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Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the limitation "to clamp after an ESD event" is not fully clear. What is being "clamp"? Similarly with the limitation "to delay during said ESD event". What is being "delay"? Moreover, the claim lacks proper structural and/or functional relationship between "a clamp circuit" and "a delay circuit".

In claim 3, it is unclear as to whether "a data cell" recited in line 2 is additional limitation "a data cell" as previously cited in claim 1.

Claim 6 recites the limitation "the third transistor" in lines 14-15. There is insufficient antecedent basis for this limitation in the claim. Did applicant intend for the limitation "the third transistor" recited in lines 14-15 to be also canceled since the limitation "a third transistor" recited in previous line already canceled?

In claim 11, there is insufficient antecedent basis for the limitations "a fourth – seventh transistors" since there is no "a third transistor".

Claim 15 calls for "further comprising a CMOS circuit" which is not seen in the preferred embodiment of the invention. Applicant should particularly point out how this limitation reads on the preferred embodiment.

Claim 18 contains the same antecedent problems as the above parallel claim 1, and is similarly rejected. Moreover, the limitation "the output of the clamp circuit responsively coupled to the input of the delay circuit" is misdescriptive of the present invention since such limitation is not seen as recited therein. In order to avoid any

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confusion, Applicant is required to particularly point out how this limitation reads on the circuit arrangement of the drawings.

Claim 19 is similarly rejected as claim 15.

Claims 2, 4-5, 7-10, 12, 13-14, 16-17 and 20 are rendered indefinite by the deficiencies of above claims.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4 and 15-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Chang et al (U.S Patent No. 6,617,649).

Chang et al disclose in Figs. 19-22 an integrated circuit device including:

a clamp circuit (ESD CLAMP) with an input and output to clamp after an ESD event;

a delay circuit (308, 310) with an input and an output to delay during the ESD event;

the coupled clamp circuit (ESD CLAMP) and delay circuit (308, 310) operable to keep voltage to one or a plurality of input nodes coupling the output of the delay circuit

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(308, 310) to a data cell (inherent seen connected TO INTERNAL CIRCUITS) below a predetermined threshold as recited in claim 1.

The delay circuit (308, 310) and the clamp circuit (ESD CLAMP) are operable as recited in claim 2. See the specification, cols. 11-12.

Regarding claim 3, the limitation "a data cell" is inherent seen connected TO INTERNAL CIRCUITS with one or a plurality of input nodes responsive coupled to the output of the delay circuit (308, 310).

Regarding the limitation "the data cell comprises an EEPROM cell", the "INTERNAL CIRCUITS" of Chang is capable of connecting to an EEPROM as recited in claim 4.

Regarding claim 15, the integrated circuit device discloses in Figs. 19-22 is a CMOS circuit.

Regarding claims 16-17, the limitations "for use in a servo motor controller" or "for use in a computer hard drive controller" are seen to define intended use. The integrated circuit device of Chang is capable of using for a servo motor controller or a computer hard drive controller as recited. In re Tuominen, 213 USPQ 89 (CCPA 1982) & In re Pearson, 494 F.2d 1399, 181 USPQ 641 (CCPA 1974).

Claims 18-20 are similarly rejected as claims 1 and 15-16.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al as applied to claim 1 above.

As stated above, every element of the claimed invention recited in above claims can be seen in the circuit of Chang. However, this reference does not specifically show "the predetermined voltage threshold is approximately 10 volts".

Although Chang et al do not expressly state the predetermined voltage threshold is approximately 10 volts, this difference is not of patentable merit because it is notoriously well known in the art that different values for the voltage threshold can be selected in order to produce correspondingly different output values. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the predetermined voltage threshold is approximately 10 volts in realizing the circuit of the Chang et al reference for the purpose of producing different output values when different values of the voltage threshold is selected.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

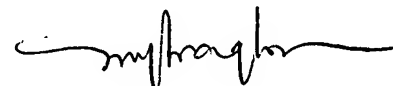
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to My-Trang N. Ton whose telephone number is 571-272-1754. The examiner can normally be reached on 7:00 a.m - 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



MY-TRANG NUTON  
PRIMARY EXAMINER

October 14, 2004